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### Socio-economic inequalities and housing in Athens: impacts of the monetary revolution of the 1990s

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SOCIO-ECONOMIC INEQUALITIES AND HOUSING  
IN ATHENS: IMPACTS OF THE MONETARY  
REVOLUTION OF THE 1990s\*\*

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INTRODUCTION: GREECE'S MONETARY  
REVOLUTION OF THE 1990s

During the 1990s, the Greek economy underwent a veritable monetary revolution. At the level of government policies, Greece was an enthusiastic co-signer of the Maastricht Treaty in 1992 (which went in force in 1993) and managed to join the Euro Zone by 2000 and the EMU (Economic and Monetary Union) by 2001 (instead of 1999 with all other candidates). In the beginning of 2002 the drachma was replaced by the Euro. During the 1990s, economic and social policy was geared to joining the EMU and observed strict Convergence Programs (1990-1993 and 1994-1999) that were manifestly targeted at monetary goals.

At the level of the economy, changes were much more radical than in other European countries joining the EMU (with the possible exception of Portugal and, to a lesser extent, Spain). Greece, by the end of the 1980s, was, jointly with Portugal, by far the least developed member of the Union both in income and consumption levels as well as in market institutions and structures. It was also a case where statism ruled in both public and private sectors, inflation was constantly above 20 per cent and public deficits and debts run at record levels. By the mid1990s, however, the strict deflationary policies of the early 1990s, reinforced by the economic recession of 1992-93 throughout the EU, have led

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\*\* Research for this paper has been partly based on routine work of monitoring trends in the Greek housing sector and partly as a contribution to the broader project on segregation and polarization in Athens carried out for the Organization for the Master Plan of Athens by the University of Thessaly under the management of Professor Thomas Maloutas.

to one-digit inflation rates. By 2000, inflation had fallen to 3.2 while long-term interest rates, which were slower in changing, fell below 10 per cent.<sup>1</sup> The dramatic reduction in the cost of borrowing, further fuelled by the extensive liberalization and privatization of the banking system, led to an explosion of credit for consumption and housing that, while still modest by European standards, constituted a major shift for Greek households which traditionally rely on personal savings and family assistance.

In terms of the real economy, Greece followed, more or less, a course similar to trends in the EU and the US: the recession of the early 1990s was followed by the prolonged expansion of 1996-2001. The structural characteristics of growth in the second half of the decade were also similar: modest GDP growth-though a bit higher in Greece due to EU support funds; expansion of credit and consumption coupled with falling savings rates; increases in household wealth due to growing liquidity; price increase of real estate assets and, until recently, of the value of bonds and shares but also significant increases in economic inequality. House building also increased during the second half of the decade, but this, in the Greek case, was mainly due to the upswing phase of the regular building cycle that started in 1996, while the trough of the cycle coincided with the low-growth years of 1992-1993.

Thus, Greece underwent a path breaking economic change in the 1990s-especially in the second half-that was, furthermore, mainly monetary in nature. Given the extent of these “modernization” changes in comparison to long-sustained practices and structures that were clearly different from the European norm, we feel justified in using the somewhat excessive term “revolution”. In this respect, the Greek experience of the 1990s may compare directly only with similar experiences in Portugal and Spain. On the other hand, despite the misleading impression that the main cause of these changes has been the EU drive towards the EMU, with varying impacts in all member countries, the Greek experience has been in essence a variation of quite similar trends and changes that swept throughout the advanced capitalist world during the 1990s. In this respect, the Greek case compares, in certain major aspects at least, to a much wider set of cases.

We will examine in this paper the impact of these trends and changes on the extent of inequality –and particularly on problems such as poverty and

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1. The drop of interest rates continued throughout 2001-2002. Thus, the average rate for six year or longer housing loans was 6.5 per cent in 2001 compared to 9.8 per cent in 2000. See the Appendix for time-series of selected indicators relevant to housing market trends.

polarization— first in terms of household consumption levels and then in terms of housing conditions and opportunities. While some general data will be given for the country as a whole, our main analysis will cover Athens as a case where the aforementioned processes —rather than special factors such as the crisis in agriculture— are more clearly manifested.

With regard to the predicted impact of the monetary revolution, especially during the second half of the 1990s, the prevailing opinion has almost been enthusiastic: Greek households would experience above average rates of income growth (with limited increase in unemployment), better services through increased market competition and the widespread benefits of low inflation and cheap credit. Skeptics stressed, in contrast, the negative income and employment effects of the austerity measures dictated by the convergence programs and the probable increase of inequality due to deregulation and pro-business policies. With regard to housing —aside from the negative prospects for socially-oriented public assistance, which did not matter much in the Greek case with its limited social sector— it was pointed out that the complete privatization and deregulation of the loans system might lead to an increased higher-income bias in credit allocation, while the benefits from the diffusion of cheap credit might be offset by higher real estate prices and the erosion of the traditional Greek system of family savings and family assistance.<sup>2</sup>

Following our previous remarks about the potentially broader interest of the Greek experience in the 1990s, this analysis of impacts can be viewed as twofold: on the one hand, as a case-study on the impact of the EMU; on the other, which probably has a wider relevance, as a case-study of the impact of the prolonged market “boom” of 1995-2001 under the guidelines of the neo-liberal “revolution” in monetary policies, institutions and practices. The essential characteristics of these two processes have been, of course, similar in many ways.

#### DEVELOPMENTS IN SOCIOECONOMIC INEQUALITY, 1989-1999

Household income statistics are considered, quite justifiably, unreliable in Greece. Thus, studies of poverty, inequality and the like have to rely on

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2. See Emmanuel and Stroussopoulou, 1994. Most critical analyses at that time, including this one, did not foresee the rapid expansion of consumption with the help of consumer credit, which led to an unprecedented fall of the savings ratio. But this was also an international trend involving factors that were not limited to Greece. Other factors that were also underestimated were the positive impact of the upswing in both the local and international business cycle and the substantial macroeconomic benefits of the 2nd Support Framework.

*consumption* figures, and more precisely on the material gathered by the Household Expenditure Surveys (HES) undertaken by the Statistical Service (NSSG) every five or six years. This is not necessarily a problem: consumption figures can offer a reasonable surrogate for *permanent income* as well as a measure of more interesting dimensions such as living conditions and poverty. They are also, arguably, more relevant to housing consumption than current income. There have been such consumption surveys in 1987/88, 1993/94 and 1998/99. These dates offer quite a good overview of developments since the late 1980s and, most especially, permit the evaluation of the period covering the mid 1990s, which is our main concern here. Unfortunately, while comparisons can be made for all three surveys for the country as a whole, comparisons for Athens will be limited to the 1994-1999 period since data for the wider conurbation of Athens –Department (Nomos) of Attika– are not available for the 1987/88 survey.<sup>3</sup>

Since our interest is not limited to an abstract statistical measure of inequality but extends to the *morphology* of income distribution with a view to issues such as polarization or relative poverty, we will subsequently use a simple stratification of households into deciles according to the monthly consumption expenditure per capita with the number of household members adjusted to a number of *equivalent adults* (*MCEA for short*). This common method of adjusting for economies of scale within a household assumes that every person of 14 years or more, aside from the first one, is counted as 0.7 adult units while those of 13 years or less are counted as 0.4 units. For each decile (successive 10 per cent segment in the sorted distribution of households by consumption level per equivalent adult) we have calculated the average MCEA, which we can compare to the average for all households as well as to the top decile (the most affluent) and the bottom decile (the poorest). In addition, we use the decile distribution to form three broad *socioeconomic strata*: “High-Income” which includes the first two deciles, “Middle-Income” including the next five deciles and “Low-Income” including the lowest three deciles. This stratification pattern is, admittedly, arbitrary. However, it serves the purpose of attracting attention to the two broad extremes of the distribution, namely the poor (relative poverty measures are usually around the 20 per cent mark) and the more affluent middle and upper class.

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3. Our statistical analysis of the three surveys has been based on the original databases supplied by the NSSG to DEPOS for 1988 and 1994 and by Professor T. Maloutas for 1999.

Table 1 shows the relationship between the average consumption expenditure (MCEA) of various deciles in the three survey periods as well as various measures of the extent of *poverty*. The poverty index, which has become standard in the EU, is a relative measure indicating the extent of *inequality* in the distribution pattern. The currently prevalent definition measures poverty as the share of households with MCEA less than 60 per cent of the *median MCEA*. We have added in Table 1 two alternative measures: the share below 55 per cent of the *average MCEA*, which relates to the method adopted in some older poverty studies,<sup>4</sup> and the share below 66 per cent of the average. The latter corresponds roughly, according to the conditions of the late

**TABLE 1**  
*Indices of inequality 1988, 1944, 1999-Country total*

T. 1A: Percent Share of "Poor" and "Low income households"			
	1988	1994	1999
"Low incomes" (66% of average)	35,1%	34,8%	38,5%
"Poor-1" (55% of average)	24,7%	23,4%	23,7%
"Poor-2" (60% of median)	19,4%	18,4%	21,2%
T. 1B: Average consumption per "capita" – Relationships between deciles			
Decile 1 / Total	2,62	2,53	2,78
Decile 1+2 / Total	2,08	2,04	2,17
Decile 10 / Total	0,28	0,31	0,27
Decile 1 / Decile 10	9,38	8,09	10,2
Average monthly consumption per adult equivalent (MCEA)	71.700	162.100	265.000
Median of MCEA	58.600	134.000	209.500

Source: Calculations based on data from NSSG, HES of 1987/88, 1993/94 and 1998/99.

4. See especially the influential study by Karagiorgas et al., 1990, 1991. This measure corresponds roughly to 50 per cent of the income average—a much simpler and meaningful measure than the overtly technical and obscure 60 per cent of the median. See, also, Emmanouel, Strousopoulou, Velidis (1996), where the importance of using *European* averages for the measurement of poverty is also stressed.

1980s at least, to the share of poverty measured by a poverty line that is defined as 55 per cent of the *European* MCEA average (EU of 12). This stratum, of the Greek poor by European standards, covered, by the end of the 1980s, about 35 per cent of Greek households and could be viewed, as more or less, the “low-income” stratum by local standards.<sup>5</sup>

Table 2 presents the changes in the indices shown in Table 1 between 1994 and 1999 for the wider Athens Region (Department of Attika). The respective deciles and poverty shares have been measured according to the *Athens* data rather than the national ones. Otherwise, by national criteria the pattern would have been substantially different with much smaller poverty shares.

**TABLE 2**  
*Indices of inequality 1994, 1999 - Attica Region*

T. 2A: Percent share of “Poor” and “Low income households”		
	1994	1999
“Low incomes”***		
(66% of average)	33.7%	36.1%
“Poor” -1		
(55% of average)	23.3%	25.4%
“Poor” -2		
(60% of median)	17.3%	19.6%
T.2B: Average consumption per “capita” – Relationships between deciles		
Decile 1/Total	2.49	2.65
Deciles 1+2/Total	2.01	2.09
Decile 10/Total	0.32	0.29
Decile 1/Decile 10	7.72	9.25
Average monthly consumption per adult equivalent (MCEA) (current prices)	189.468	321.522
Median of MCEA (current prices)	156.400	263.750

Source: Calculations based on data from NSSG, HES of 1987/88, 1993/94 and 1998/99.  
(\*\*): Note: Groups are based on the average and median for the Attika population.

5. See Emmanuel et al., 1996. With the slow-paced but nonetheless significant reduction in the distance between average MCEA in Europe and Greece during the 1990s, this index might require readjustment. On the other hand, such yardsticks that reflect developmental aspirations should be changed only after considerable periods of time.



According to the data shown in Table 1, the extent of poverty in the country as a whole was reduced between 1988 and 1994, despite the recession in the beginning of the 1990s, and *increased* quite significantly (by as much as 15 per cent) during 1994-1999. Thus, there was an increase in inequality both in the whole period and especially in the second part. Regarding the more detailed picture for the relative position of strata according to deciles, there is also a *prima facie* case for an increase in polarization due to a drop in the relative position of the poor and an improvement in the position of the more affluent. Indeed, the richer 10 per cent of households, and to a lesser extent the richer 20 per cent, have shown a substantial increase in their ratio to average consumption levels (to the MCEA of the average household and that of the fifth decile) while the opposite took place for the poorer 10 per cent. Again, this “opening of the scissors” took place in 1994-1999 while the opposite was true for 1988-1994.

The increased economic distance between affluent and poor was to a large extent an expected result of the influx of poor economic migrants after 1990-by the end of the decade these constituted more than 7 per cent of the population both in the country as a whole and in the Athens region. However, it was also due to the relatively faster improvement of the upper strata in respect to the indigenous middle-income groups: between 1994 and 1999 the MCEA ratio of the top 10 per cent to the fifth decile increased by more than 13 per cent (3.22 from 2.84).

Of course, these shifts in relative positions should be viewed against the backdrop of overall economic development. After the recession of 1992-1993 and especially after 1995, Greek GDP at constant prices grew by rates that were above EU-15 averages-roughly 3 per cent for 1995-1999.<sup>6</sup> However, during these years of satisfactory economic growth, private disposable income as a share of GDP showed a dramatic drop: from 90 per cent in 1994 to less than 80 per cent in 2000 (Appendix 1) presumably due to increased taxation and increases in the share of corporate profits. As a result, average household income showed no real improvement despite the positive trends in overall growth. Household consumption, on the other hand, fuelled by the liberalization of banking and finance and rapidly expanding cheap consumer credit, showed significant increases throughout the 1990s with the exception of 1993: its average real growth rate for 1994-2000 was more than 2.5 per cent. This took place, of course, at the expense of the savings rate, which fell from its traditional levels of 17-20 per cent to a record low of 11.4 per cent in 2000.

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6. See the Table in the Appendix and Eurostat Yearbook, 2002.



Thus, the observed increase in inequalities in the standard of living during 1994-1999, while indisputably a result of a significant redistribution of income, was experienced in a less painful way, as differential rate of *improvement* in consumption levels among different strata. For many Greek commentators, this increase in inequality was but the natural result of healthy economic growth driven by the newfound pro-market climate of the 1990s and the necessary economic reforms introduced by the drive towards the EMU.

In the case of Athens (Region of Attika) the growth of consumption levels was more pronounced. While the ratio of the average MCEA of the region to that of the country was 1.17 to 1 in 1994, it became 1.21 to 1 in 1999 - a relative increase of +3.4 per cent. Hence, the real increase of the average MCEA in Athens over the 1994-1999 period, assisted by the gradual reduction of household size, has been 25 per cent. The shift in inequalities, however, as shown in Table 2, has been similar in Athens to that of the country as a whole - despite the structural economic differences due to the lack of an agricultural sector. Thus, the morphology of changes in distribution has been uniform throughout Greek society.

#### WAS THERE POLARIZATION?

While, in our opinion, the concept of “polarization” should include the case of the “opening of the scissors” –that is, the increasing of the distance between the economic condition of the top and bottom strata– it is commonly applied to cases where there is an increase in size of the two extremes of the distribution with a corresponding reduction in the size of the middle stratum.<sup>7</sup>

We have shown that the economic distance between the extremes of the distribution did indeed increase. Was there also polarization in the sense of a reduction of the middle strata? Since our present analysis is based on relative groupings, such as deciles or strata defined with respect to the average, we obviously cannot use fixed definitions of strata based on occupational classes or other “structural” criteria.<sup>8</sup> Neither fixed income nor consumption ranges can be applied in long-term analyses. Furthermore, we had to devise a method

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7. See the discussion in Maloutas et al., 2000.

8. This would have shifted the analysis outside the scope of the present examination of inequalities. Independently of the rather limited present examination, we believe that a “structural” concept of stratification based on some Weberian criterion of “market situation” is more appropriate. It also connects better to the established notion of “permanent” income in economics. See our model of stratification introduced in Emmanuel et al., 1996.

that can depict the morphology of the distribution in an accurate as well as easily perceived descriptive way that highlights both the two extremes and the middle-in contrast to the usual cumulative distribution of the Gini coefficient of inequality.

We found that, in keeping with the currently established emphasis on relative groupings, a distribution based on ranges defined by constant percentage increases or decreases of the *average* MCEA (consumption per capita) provides quite an adequate framework. As a first step, we created a series of ten groupings based on +/- 30 per cent changes of the average MCEA. This percentage step is, of course arbitrary but, for the Athens data, it provides ten broad groupings that cover essentially the whole of the population. For other cities a different percentage step may be required. The ranges created thus (in terms of approximate ratios to the average) are the following:

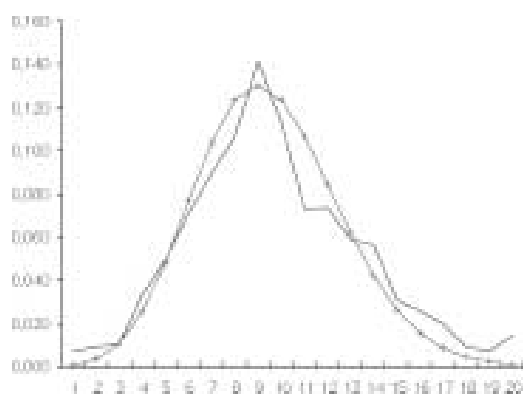
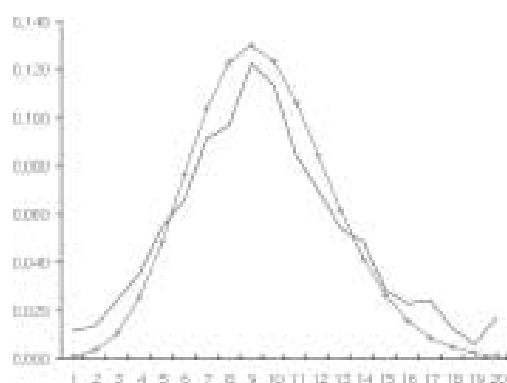
- |                |                 |
|----------------|-----------------|
| 1. 0.18 - 0.25 | 6. 1.00 - 1.30  |
| 2. 0.25 - 0.35 | 7. 1.30 - 1.70  |
| 3. 0.35 - 0.50 | 8. 1.70 - 2.20  |
| 4. 0.50 - 0.70 | 9. 2.20 - 2.85  |
| 5. 0.70 - 1.00 | 10. 2.85 - 3.70 |

This set of ranges covers 99 per cent of households in the 1994 Household Expenditure Survey; the remainder –some very affluent households and a few very poor– have MCEAs beyond this range. The same holds true for the 1999 HES also. These ten groupings were further subdivided, for the sake of better graphical depiction, into two equal ranges by reducing by a factor of -16 per cent the points below 1.0 or augmenting by +14 per cent the points above 1.0: thus we've got twenty ranges based on relative position to the average MCEA. The distributions of households in Athens for 1994 and 1999 are shown in Diagrams 1 and 2.

The distributions derived in this manner (expressed in shares of all households) follow surprisingly well the density function of the *Poisson Distribution* - a very common probability distribution, often observed, among other classes of phenomena in competitive natural ecologies. The density function of the Poisson distribution is

$$F(x) = \exp(-m) m^x / x! \quad (i)$$

Variable  $x$  takes, in this case, values from 1 to 20 and  $m$  has the value of the point where the highest concentration (the mode) occurs - in this case range 9. We found that we had the best fit with the actual data for  $m = 9,5$ . The corresponding density function for this parameter is shown as a fixed reference

**DIAGRAM 1***Distribution for 1994 – Actual and Poisson Model***DIAGRAM 2***Distribution for 1999 – Actual and Poisson Model*

point in both diagrams 1 and 2. The regression coefficients ( $R^2$ ) of the fixed Poisson distribution with the actual ones for 1994 and 1999 are 0,9484 and 0,9742 respectively – that is, there is quite good a fit in both cases and an improved one for 1999. Moreover, we can safely say that there is a shift towards increased polarisation: the middle highest point of the curve is lowered in 1999 and both of the two extremes appear to have risen significantly over the ends of the fixed common probability distribution. Admittedly, these changes are not spectacular, but we also have to take into account the short span of the time frame: only five years.

We may further support our findings by a simple examination of shares. The percentage of the “middle” ranges 7 to 12 has decreased from 59.7 per cent to 58 per cent while that of the “upper-middle” ranges 13 to 16, has decreased from 17.3 per cent to 15.5 per cent. In contrast, the upper ranges 17 to 20 increased their share from 5.0 per cent to 6.0 per cent and the poorer groups 1 to 6 from 18.0 per cent to 20.5 per cent. Again, it can be argued that these changes are not particularly impressive, but the reduction of the share of a broad “middle stratum” (ranges 7 to 16) by 3.5 percentage points within five years may be quite significant if it is the reflection of a trend. We should also keep in mind that these facts are based on *consumption* data—the shifts in terms of *incomes* were, most probably, more pronounced.

#### DEVELOPMENTS IN THE HOUSING MARKET DURING THE 1990s

Before we turn to an examination of changes in conditions and inequalities in housing –given the broader economic changes described previously– it is necessary to outline shortly the major developments and conditions in the housing market as a whole during the 1990s. We have already noted the increases in consumption spending and the significant reduction of the savings ratio among households fuelled, mainly, by falling inflation rates and the rapid expansion of cheap credit. The growth of consumption as well as the impressive expansion of mortgage lending for housing are documented in the statistical series in the Appendix.

Despite, however, the increase of consumption and housing credit, house building has not shown any significant increase: if we take into account the normal *building cycle* with its approximate 10-year duration, house building permits (equivalent to housing starts) have not increased much during the second half of the decade. As a result, the *cumulative supply* of new dwellings (over a five-year period commencing at year  $t-1$ ), influenced by the trough of the cycle in the middle of the decade, has grown at rates that have lagged behind rising consumption demand. Supply has also lagged behind the growth of *liquidity* which is, in many ways, a better gauge of potential real property demand: the ratio of liquidity to cumulative new dwellings supply has risen from 2.5 in 1991 to about 4.5 by 1999-2001 – an 80 per cent increase (cf. Appendix).

While the growth of liquidity in relation to supply is quite impressive, the extent of rising disequilibria in the demand-supply balance is much more pronounced if we examine the expansion of housing credit. While before the mid-1990s, the share of housing finance (changes in bank balances) in gross residential investment (minus land costs) was below 10 per cent, it exploded to

25 per cent by 1999. It then went on increasing at near-explosive rates during 2000-2002 (the increase between 2000 and 2001 was 85 per cent whereas that for 1999-2000 was “only” 32 per cent). Arguably, a lot of these new cheap loans were for the refinancing of older debt or for renovation and improvements: quite probably a substantial part of these resources was also re-channelled to consumption. Nevertheless, the pressure in the real estate market has been rapidly growing with the result that housing prices have shown phenomenal increases. According to the PROPINDEX (a privately sponsored index of limited circulation reported in Bank of Greece, 2002) the average price of marketed dwellings in Athens increased in *real terms* by 32.5 per cent between 1994 and 1999: most of the increase took place during 1996-99 (28.7 per cent). For the two years 1999-2001 the increase has been 24.5 per cent!

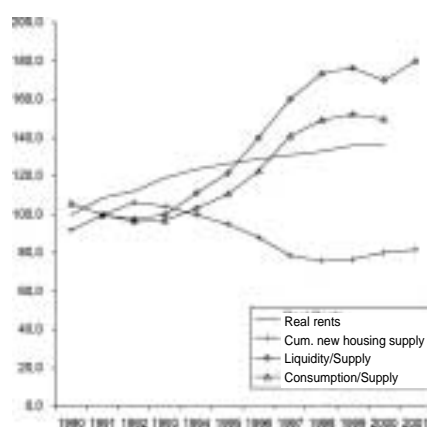
These facts about price increases are based on (admittedly quite extensive) sampling of *newspaper ads* – therefore, there is, most probably, a significant element of overestimation.<sup>9</sup> Nevertheless, the increases in prices have been phenomenal by Greek standards<sup>10</sup> and they have essentially been a transfer of resources to land and property owners: the trends in construction costs (materials and labour) have not shown any particularly negative trends relative to general inflation. In the diminishing rental sector, rents have not been as affected by the imbalances in supply and demand and the price index of real rents has not shown increases as steep as those of prices. Diagram 3, based on figures in the Appendix summarizes these trends in prices and supply and demand relationships for 1990-2001.

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9. Using the data of two extensive surveys carried out by the DEPOS Research Unit we found that the average unit price increase (in real terms) for all owner-occupiers between 1989 and 1999 was for Athens a bit less than 22 per cent. However, this reflects the valuation of *all* of the existing stock rather than the parts offered for sale and the more “marketable” areas. This fact may account for some of the difference with the PROPINDEX data. Interestingly, average real price increases were quite different among different social strata: about 20 per cent in the upper stratum, 25 per cent in the middle and 17 per cent in the lower income one. This is due, most probably, to corresponding differences in the expansion of demand.

10. Not by international standards though, with the extensive house price boom experienced by quite a few advanced countries during the same period. This is not the place to join the rich literature discussing the question whether or not the price boom has been (and still is) a “bubble”. To echo the predominant opinion among real estate economists, the “real” demand and supply factors can, arguably, account for most of the increases. On the other hand, we may very well argue that there has been a “bubble” albeit in the monetary “real” factors. We will comment on this later in the course of this paper.

**DIAGRAM 3**  
*Housing market trends 1990-2001*



### INEQUALITIES IN CREDIT EXPANSION

While the mortgage credit explosion has received much attention only recently (credit balances grew during 2000-2002 by more than 30 per cent per *annum*), there have also been quite impressive changes in credit supply during 1994-1999. By 1994 (HES of 93/94), less than 10 per cent of owner-occupiers in Attika were repaying a loan or had mortgaged their property. This share grew to about 13 per cent by 1999. More importantly, the share of credit recipients among *recent buyers* more than doubled in the second half of the decade. However, this impressive expansion has taken place within a context of extensive inequalities in the distribution of resources and at different rates for different social groups. The flow of resources mostly benefited the middle and, to an even higher extent, the upper strata. On the other hand, the *rate* of credit expansion was apparently higher among lower strata and, to a lesser extent, upper strata. The relevant data are presented in Table 3.

Households in Table 3 are divided into three broad socio-economic strata according to the decile they belong in the distribution (for Athens) by monthly consumption per capita ("adult equivalent"). *Upper strata*, as defined before, correspond to the two highest deciles, *middle strata* to the next 5 deciles and *lower strata* to the lowest three deciles. Table 3 shows the owner-occupiers of these strata and, among these, the households with loan/mortgage as a percentage of either all owners or the sub-group that bought their home recently-during the last ten years or during the last five. The share of those that used a loan among all owners that bought their home during the last ten years

**TABLE 3***Share of loan recipients by major socio-economic strata, Attika 1994 and 1999*

	1994			1999				
	Owner- occupiers	With loan, mortgage		Owner- occupiers	With loan, mortgage			
Higher decil. 1-2	385	46	11.9%	408	68	16.7%		
Middle decil. 3-7	947	91	9.6%	988	133	13.5%		
Lower decil. 8-10	493	40	8.1%	463	38	8.2%		
Attika total	1825	177	9.7%	1859	239	12.9%		
1999								
	Buyers of last 10 years % of owners		Of which with loan % of buyers		Buyers of last 5 years % of owners		Of which with loan % of buyers	
Higher decil.1-2	121	29.7%	39	32.2%	53	13.0%	25	47.1%
Middle decil.3-7	257	26.0%	71	27.6%	126	12.7%	45	35.7%
Lower decil.8-10	97	21.0%	16	16.5%	41	8.8%	11	26.8%
Attika total	475	25.6%	126	26.5%	220	11.8%	81	36.8

ending in 1999 was 26,5 per cent. The respective share for those that bought during the last five years was 36,5 per cent. This implies that the extent of credit use among buyers during the second half of the decade had more than doubled.<sup>11</sup>

Table 3 shows also the differences in these patterns in housing finance among major socioeconomic strata. With regard to the role of mortgage lending within the owner-occupier category among each stratum, it is evident that the rate of expansion during 1994-99 was much greater in the upper stratum and, to a lesser extent, the middle one while the ratio of owners currently repaying loans or just having mortgages remained almost constant at

11. The actual increase of the use of loans for buying a home might have been somewhat lower. The 1998/99 household expenditure survey includes among loan recipients those that have mortgaged their home for other purposes-e.g. for credit supplied to their offspring or for business loans. Unpublished data from the DEPOS 1999 survey corroborate this. The share of home buyers in Athens that have received a bank loan was 43.2 per cent for buyers during 1989-99 and 51.3 per cent for buyers during 1994-99. The increase of credit use was equally pronounced among those building their own house on a plot (not counted as buyers). However, this has been a small and dwindling minority: while 15 per cent of new homeowners during 1989-1999 were owner-builders, their share fell to 10 per cent during 1994-1999.



a bit above 8 per cent in the case of the lower stratum. Part of the reason for this impressive stability in the case of lower strata may be the comparatively higher role of “social” loans-bank loans offered through the procedures of and subsidized by the Workers Housing Organization (WHO) which have certainly not expanded at rates approaching those observed in the private sector. In addition, there are loans offered *directly* by the WHO which may increase somewhat the share presented in Table 3-though these certainly do not account for more than 3 or 4 per cent of lower-income owner occupiers. These loans have also grown at a much slower pace. On the other hand, WHO loans are not necessarily restricted to the lower stratum and may have near-equally contributed to the supply of loans for the middle stratum. In any case, we can safely say that the fast growth of commodified financing in housing has shown great social imbalance-though it is a relatively unclear to what extent this has been due to institutional problems peculiar to Greece or is, simply, the predictable outcome of “normal” market processes.

The second part of Table 3, covering buyers of the last ten and five years, shows similar sharp inequalities in the rates of credit use among the three major strata. These are accentuated by the differences in the extent of effective demand for owner-occupation. In all cases, however, we do have a substantial expansion of credit use during the second half of the decade. Peculiarly, the *rate* of credit expansion seems to have been faster among the lower stratum-an increase of percentage points that is higher than 60 per cent (26,8 per cent from 16,5 per cent) while that for the upper stratum is 46 per cent and for the middle one only 29 per cent. Of course, it can be argued that the lower strata have started from a much lower initial point. Still, these figures seem to contradict our earlier observation about the stability in the role of credit among lower strata between 1993/94 and 1988/89.

This apparent paradox, however, is explained if we consider the different nature of data in the two parts of Table 3. In contrast to the second part about buyers, which is wholly drawn from the 1999 survey, the lower strata of 1994 and 1999 are not the *same group* of households. By definition, the lowest three deciles at any time are composed by those that have fallen below a relative line at that particular time. If the move to owner occupation through a loan among the low-consumption households of 1994 has been associated with an *improvement* in their relative status, these households have moved up to the middle stratum while others that have been less fortunate have moved *down* to the lower one. In addition, the lower strata of 1999 have received the bulk of the influx of economic migrants. Thus, the composition of the lower stratum is in a certain flux and it always “attracts” the less fortunate in terms of current

**TABLE 4***Tenure shares by major socio-economic stratum, Attika 1994 and 1999*

	1994			1999		
	Owner-occupiers	Renters	Free of charge	Owner-occupiers	Renters	Free of charge
Higher decil. 1-2	71.6%	26.6%	1.9%	72.1%	23.5%	4.4%
Middle decil. 3-7	70.4%	27.5%	2.1%	69.8%	24.7%	5.4%
Lower decil. 8-10	61.1%	35.6%	3.3%	54.8%	38.8%	6.4%
Attika total	67.8%	29.7%	2.4%	65.8%	28.7%	5.5%

living standard. It is among this temporarily defined category that the limited access to housing credit persists as shown in Table 3. Viewed from another angle, this fact shows that while there have been expanding credit opportunities in the 1990s and a certain upward mobility in the condition of housing and consumption among lower-income households, the overall net effect in terms of statistical *structure* has not been a positive one.

Expanding credit opportunities should lead, normally, to increasing access to owner-occupation. However, the stability in structure vis-à-vis the condition of the lower stratum, noted previously, is also evident in the tenure pattern. Table 4 shows the tenure composition of each major stratum of Athens (Attika) in 1994 and in 1999. While the percent share of renters has decreased by about three percentage points among the upper and middle strata, it has increased by three points in the case of the lower stratum. Admittedly, this shift is mainly due to the inflow of foreign migrants during the 1990s: these amounted by the end of the decade to more than 6 per cent of households and resided almost exclusively in rented accommodation (Emmanuel, 2002). Even if we take this into account, however, the implied rent share for “Greek” low-income households should be no less than 35 to 36 per cent, that is, no different from 1994. Consequently, in terms of the stratification structure there has been a notable *increase* of inequalities in terms of access to owner occupation.

From a long run perspective, however, even the improvements in the tenure pattern among middle and upper strata appear quite problematic in the light of the major increase in credit availability. During the late 1980s and early 1990s when economic trends and credit conditions were much more adverse, the share of tenants in the Athens Conurbation (about 95 per cent of Attika), fell by 2,5 percentage points (1987/88: 33,5 per cent, 1993/94: 31,0 per cent). In the case of the lower stratum (defined by roughly similar criteria to the one presented here) the improvement was greater: *four* percentage points - from 41,8 per cent to 37,8 per cent (Emmanuel et al., 1996, p. 370). Thus, during the

**TABLE 5***Housing conditions and rents by stratum, Attika 1994 and 1999 Owner-Occupiers*

	1994		1999	
	Square meters per "capita"	Imputed rent per sq.m. (drs)	Square meters per "capita"	Imputed rent per sq.m. (drs)
Higher decil. 1-2	58.9 (1,76)	963.5 (1,28)	58.9 (1,75)	1603.6 (1,50)
Middle decil. 3-7	42.3 (1,26)	866.4 (1,15)	41.9 (1,25)	1205.2 (1,13)
Lower decil. 8-10	33.5 (1,00)	752.4 (1,00)	33.6 (1,00)	1065.8 (1,00)
Attika total	43.4	856.1	43.6	1257.9

Source: Notes: "capita" = "adult equivalent". Numbers in parentheses show relationships with lower stratum averages. Rents are in current drachmas.

first years, at least, of the period of credit explosion and lower interest rates there has been no *improvement* over past trends in tenure patterns and a noticeable worsening of conditions for the lower strata.

A further point of interest in Table 4 is that if we examine not the share of renters but that of owner-occupiers there have been no real tenure improvements even for middle and upper strata, in sharp contrast to the previous decades. What changed significantly was the share of those living *free of charge* - essentially in homes supplied by relatives (from 2,4 per cent to 5,5 per cent). This peculiar shift, however, might be due, in most part, to tax avoidance strategies given the sharp increase of taxation of rental property during the 1990s.

#### IMPACTS: HOUSING COSTS AND CONDITIONS

During the second half of the 1990s we had a significant increase in real consumption expenditure, a near-explosive growth of credit and a radical reduction of interest rates. It should have been a good time for improving the housing condition of urban households and as much was expected at the beginning of the EMU process. In fact, basic conditions *did not* improve. Table 5 shows the average square meters per "adult equivalent" for owner-occupiers in the Athens Region (Attika) for 1994 and 1999. It also shows the average rental value (monthly imputed rent) in current drachmas. Both indicators are shown for each of the three broad socioeconomic strata we have

**TABLE 6***Housing conditions and rents by stratum, Attica 1994 and 1999-renters*

	1994		1999	
	Square meters per "capita"	Rent per sq.m. (drs)	Square meters per "capita"	Rent per sq.m. (drs)
Higher decil. 1-2	52.9 (1,80)	969.5 (1,31)	54.1 (1,99)	1335.3 (1,19)
Middle decil. 3-7	37.5 (1,27)	856.4 (1,15)	38.1 (1,40)	1212.3 (1,08)
Lower decil. 8-10	29.4 (1,00)	742.0 (1,00)	27.2 (1,00)	1123.6 (1,00)
Attika Total	37.4	844.7	36.3	1196.6

Source: Notes: "capita" = "adult equivalent". Numbers in parentheses show relationships with lower stratum averages. Rents are in current drachmas.

been examining and, in parentheses, the relationship of each stratum with the lower one.

Housing space conditions in Athens have shown an impressive stability between 1994-99 both for all owner-occupiers as well as for each particular stratum. In contrast, between 1989 and 1994 we had a substantial improvement from 39,5 sq.m. to 43,4 sq.m. per capita. Given these trends, there has been no shift in the broad pattern of inequalities in living space standards. However, there seems to be a significant increase of inequality and polarization in terms of the average rental value of dwellings: while the relative position of the middle stratum vis-à-vis the lower one remained roughly the same, the relative position of the upper stratum improved by 17 per cent. Given the limited increase in real rents (by 3,4 per cent during 1994-99), the nominal changes in average rental values imply a certain improvement in terms of quality and services for all strata. The improvement, however, was evidently greater in the case of the more affluent groups although there may also have been, to a certain extent, higher rent inflation in this specific sub-market due to the higher increase of consumption demand.

Table 6 shows the equivalent changes for renters. There has been a small *decrease* in average dwelling space per capita. The main reason for this was, of course, the inflow of foreign migrants in Athens who are concentrated near-exclusively in the rental sector. As a result, space conditions worsened significantly in the lower stratum. On the other hand, there was improvement for middle and upper groups and consequently a substantial increase of

**TABLE 7***Trends in conditions and values in the 1990s by major strata, Attika*

	Buys of last 10 years		Buys of last 5 years	
	Average age of dwelling	Square meters per "capita"*	Average age of dwelling	Square meters per "capita"
Higher decil. 1-2	15.6 (0,71)	55.3 (1,76)	15.5 (0,65)	54.5 (1,76)
Middle decil. 3-7	14.9 (0,68)	39.5 (1,26)	13.3 (0,56)	38.4 (1,24)
Lower decil. 8-10	22.0 (1,00)	31.4 (1,00)	23.7 (1,00)	31.0 (1,00)
Attika Total	16.5	40.9	15.8	40.9

Source: Notes: "capita" = "adult equivalent". Numbers in parentheses show relationships with lower stratum averages. Calculations based on the 1999 HES.

inequalities in space conditions in the rental sector as a whole. In contrast, the relationship between average rents per square meter per stratum *improved* in a way apparently favouring the lower stratum. In this case, however, given the rapid increase of demographic pressure in the lower segment of the rental sector and the fact that foreign migrant households are prepared to accept much worse density conditions –and, therefore, higher rent payments per square meter– we can only assume that this "improvement" mainly reflects higher rents relative to inflation rather than improved real values.

To sum up the evidence reviewed up to this point, the opportunities offered by the much-expected revolution in monetary conditions have evidently been completely counterbalanced by the explosion in real estate prices and, in parts of the market, the increase of rents with the result that housing conditions have stopped improving, compared to past trends, while in many aspects of the housing system of Athens there has been an increase in overall social inequalities.

In view of the evidence of price changes, this should not come as a surprise. Between 1996 and 2001 we had a major decrease in interest rates from 18 to 6 per cent. This implies a reduction of monthly payments for housing loans by as much as 47 per cent though actual benefits were lower due to the corresponding decrease of tax benefits (interest payments were deducted from taxable income). Housing prices, however, have increased by as much or at higher rates. Moreover, we should take into account the fact that during the years of high nominal interest rates there have also been high *inflation* rates that obviously benefit the debtors: the real cost of repayments was greatly

reduced two or three years after receiving the loan. Similar points can be made for the 1994-1999 period covered by our data. Nominal interest rates were reduced from 20-22 per cent to 10-12 per cent (depending on subsidies). This amounts to about 35 per cent decrease in payments but we have to take into account the fall in inflation rates, which reduced the benefits and the fact that loans rarely exceeded half the value of the acquired property. During the same time housing prices rose by about 30 per cent. Thus, again, the benefits were more than completely offset by rising costs.

It could be argued that the distribution data presented in Tables 5 and 6 are not sufficiently dynamic: we may well have stability at the level of structure but this probably hides the improvement experienced at the level of mobility processes and individual households—a point made also in the case of consumption levels. Table 7 attempts to examine these aspects by considering the *home buyers* of the 1990s from the HES of 1999. The table shows the average age of the unit bought and the average square meters per capita (equivalent adult) for buyers of the last ten years and five years respectively.

It is evident from the data in Table 7 that buyers of the last five years (the second half of the 1990s) have bought into slightly worse conditions than previous ones, certainly with respect to space and in part, especially in the case of lower strata, with regard to the age of the dwelling. Of course, this comparison involves complex factors having to do with the life cycle and the size of the household, which change with time and may affect housing conditions. In any case, however, the overall thrust of the evidence is clear: there have not been significant improvements even at the dynamic level of households moving into newly acquired property.

### CONCLUDING REMARKS

It is obvious from the data reviewed for the 1994-1999 period that the Greek “monetary revolution” induced by the process of European Monetary Union and the policies and trends that swept most advanced countries in the second half of the decade, had not the expected positive effects in the case of the housing market of Athens. Quite surprisingly, it had significant negative effects in comparison to the slow but steady trends of improvement in housing conditions, tenure patterns and indices of inequality established during the 1980s and early 1990s. The main culprit for this has been, of course, the rampant inflation in property prices fuelled by the rapid expansion of consumption demand and liquidity in the household sector under conditions of limited overall supply and weak responses from the house building industry.

In retrospect, however, these negative impacts should be less of a surprise. First, the size of household income is the main criterion for commercial credit allocation. Income inequalities, however, are much more acute than housing inequalities. As a result, the massive expansion of commercial bank credit for housing reinforced the influence of income inequalities –due to the very rules under which banks operate– in housing finance (and thus inequalities in housing opportunities) to an extent that was alien to the “traditional” Greek system based on family savings and limited state-controlled mortgage credit. Second, the Greek level of development both in terms of incomes and housing values is still at the lowest point among EU members. Greek real estate specialists and bankers love to repeat that the local market has almost unlimited potential for credit expansion compared with credit use levels in Europe.<sup>12</sup> What they ignore is that this process is not independent from local institutional factors and the level of economic development, which determines incomes and property values (Hardt, 2000). Aside from the particular institutional factors that differentiate the Greek housing system from that of advanced European countries, commercial banks will find it increasingly difficult to expand into the middle and lower than middle sector of the market dominated as it is by low and largely “informal” incomes and marginal housing properties with limited value and marketability.

It is customary to summarize the level of development of a housing system in terms of access to adequate housing by a simple ratio of the median housing price to the median annual household income. In the US, for instance, this ratio in the 1990s fluctuated around 3.3 (Carliner, 2002). At first glance, Athens in 1999 did not fare badly according to this empirical criterion having a ratio around 3.1.<sup>13</sup> There were major differences however behind this comforting summary picture. Due to the much larger average household size in Athens compared to US cities, the per capita ratio is by more than 30 per cent higher in the Greek case—a fact that indicates much greater household effort for attaining

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12. According to Bank of Greece data, the ratio of outstanding housing loans to GDP was 12 per cent in 2000 from 6,5 per cent in 1998 and 4,5 per cent in 1995. By mid-2002 this ratio must have reached a level around 17 per cent. The average ratio for EU15 was more than 32 per cent by 1998 and has been fast increasing throughout the 1990s (Hardt, 2000).

13. Median housing price was about 18,0 ml Drachmas (52,825 Euro) and median annual consumption about 6,6 ml drachmas (19,369 Euro). Adjusting consumption for disposable income by more than 10 per cent and housing prices by 25 per cent in order to approach the standards of the more “respectable” market with mortgages on which the US data are based, we get roughly 3.1.



average housing targets. Moreover, even the median household income and the median housing value are at the margin, to say the least, of what the proper real estate market and commercial bank practice would consider acceptable and promising. In fact, most middle-income households would express the same opinion. Given the pattern of inequalities we have been describing, these problems become much more acute as we move below the median level. Under these conditions, it should come as no surprise that a housing strategy based solely on “monetary” means, commercial banking criteria and in a context that favours price speculation would have caused a massive waste of resources for no real housing improvement as well as a reinforcement of existing inequities.

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**APPENDIX***Housing market indicators 1990-2000*

Year	PriConsum	Liquidity	NewDwel	CumNDwel
1990	9627,70		120240	486387
1991	9917,22	13508,8	100339	530863
1992	10138,19	13900,8	85095	562676
1993	10040,74	14010,8	79150	553372
1994	10252,98	14956,7	80607	530035
1995	10402,97	15524,0	70862	502151
1996	10654,96	16543,9	86693	465431
1997	10947,73	16901,2	89651	416053
1998	11245,69	17708,9	97411	402407
1999	11548,53	18229,3	88450	406963
2000*	11894,39		89398	425224
2001*				433067

Year	Hdem1/Hsup	Hdem2/Hsup	Rents	IntRate
1990	19,8	2,54	100,0	24,00
1991	18,7	2,47	108,5	22,50
1992	18,0	2,53	112,0	22,50
1993	18,1	2,82	119,0	20,25
1994	19,3	3,09	123,2	17,50
1995	20,7	3,55	126,3	14,20
1996	22,9	4,06	128,6	11,20
1997	26,3	4,40	131,0	11,30
1998	27,9	4,48	133,0	10,30
1999	28,4	4,33	135,6	8,26
2000*	28,0	4,40	136,5	4,60
2001*				

PriConsum	Private Consumption, billion drachmas, constant 1990 prices
Liquidity	Liquidity Indicator M4 (new) (constant billion drs)
NewDwel	Number of New Dwellings (permits)
CumNDwel	Housing Supply measured by the cumulative 5-yr New Dwellings supply, summing permits for the period t-2 to t-6
Hdem1/Hsup	Demand/Supply Index 1: PriConsum/CumNDwel
Hdem2/Hsup	Demand/Supply Index 2: Liquidity/CumNDwel
Rents	Real Rents Index (Rents Index/Consumer Price Index)
IntRate	Interest Rates of Treasury bills (year end)